

## PROJECT DESCRIPTION

## GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS, COUNTDOWN PEDESTRIAN SIGNALS AND ADA RAMP MODIFICATIONS ON THE WEST LEG OF THE INTERSECTION OF MD 140 (E. MAIN STREET) AND SILO HILL ROAD IN FREDERICK COUNTY MARYLAND.

MD 140 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

## INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL TRAFFIC-ACTUATED MODE. THE EXISTING MAINLINE EXCLUSIVE/PERMISSIVE LEFT TURN PHASING WILL REMAIN. AN ALTERNATIVE SIDE STREET PEDESTRIAN PHASE IS PROPOSED.

## CONTROLLER REQUIREMENTS

INSTALL A NEMA SIZE "6" BASE MOUNTED CABINET. THE SHA SIGNAL SHOP WILL SUPPLY A NEMA EIGHT-PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER WITH ASSOCIATED HARNESSES, ONE (1) 4 CHANNEL DETECTOR/AMPLIFIER, ONE (1) VIDEO DETECTION INTERFACE EQUIPMENT, 1-4 CAMERAS AND ONE (1) 2 WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

## APS WILL FUNCTION AS FOLLOWS:

TO CROSS EAST MAIN STREET

- A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS EAST MAIN AT SILO HILL, WAIT".
- B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon  
Assistant District Engineer - Traffic  
Phone: 301-624-8140

Ms. Andrea Abend  
District Utility Engineer  
Phone: 301-624-8115

Ms. Sue Palmer  
Assistant District Engineer - Maintenance  
Phone: 301-624-8105

OFFICE OF TRAFFIC AND SAFETY:

Mr. Richard L. Daff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
410-787-7630

Mr. Edward Rodenhizer  
Team Leader Signal Operations  
Phone: 410-787-7650

Mr. Eugene Bailey  
Team Leader Sign Operations  
410-787-7670

The Power Company is:  
Allegheny Power  
P.O. Box 1392  
Fairmont, WV 26554  
Phone: 304-367-3370

## EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9044	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9570	19 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN: 1 EA - OMI-3 (18 IN. X 18 IN.) 2 EA - WII-2 (30 IN. X 30 IN.) 1 EA - W16-7p(L) (24 IN. X 12 IN.) 1 EA - W16-7p(R) (24 IN. X 12 IN.)
9571	2 SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN: 2 EA - R10-3(I) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS EAST MAIN ST"

## EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1003	2 EA	MAINTENANCE OF TRAFFIC
2001	2 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5003	2 EA	REM OF EXISTING PERM PVMT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS
5005	300 LF	REM OF EXISTING PERM PVMT LINE MARKINGS ANY WIDTH
5006	365 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5007	50 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	350 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	900 SF	5 INCH CONCRETE SIDEWALK
6003	75 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	1 EA	2 WIRE CENTRAL CONTROL UNIT
8004	1 EA	ADJUST EXISTING HANDHOLE TO GRADE INCLUDING COLLAR
8007	2 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8008	2 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8013	2 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8020	2 EA	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT
8021	1 EA	REM & DISPOSE MAT & EQUIP PER ASSIGN
8025	4 EA	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8030	500 LF	DISCONNECT, PULL-BACK & REROUTE CABLES
8033	125 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8034	185 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8035	50 LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8036	21 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8038	425 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8041	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8044	45 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8045	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8054	350 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	360 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	2,000 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8058	550 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

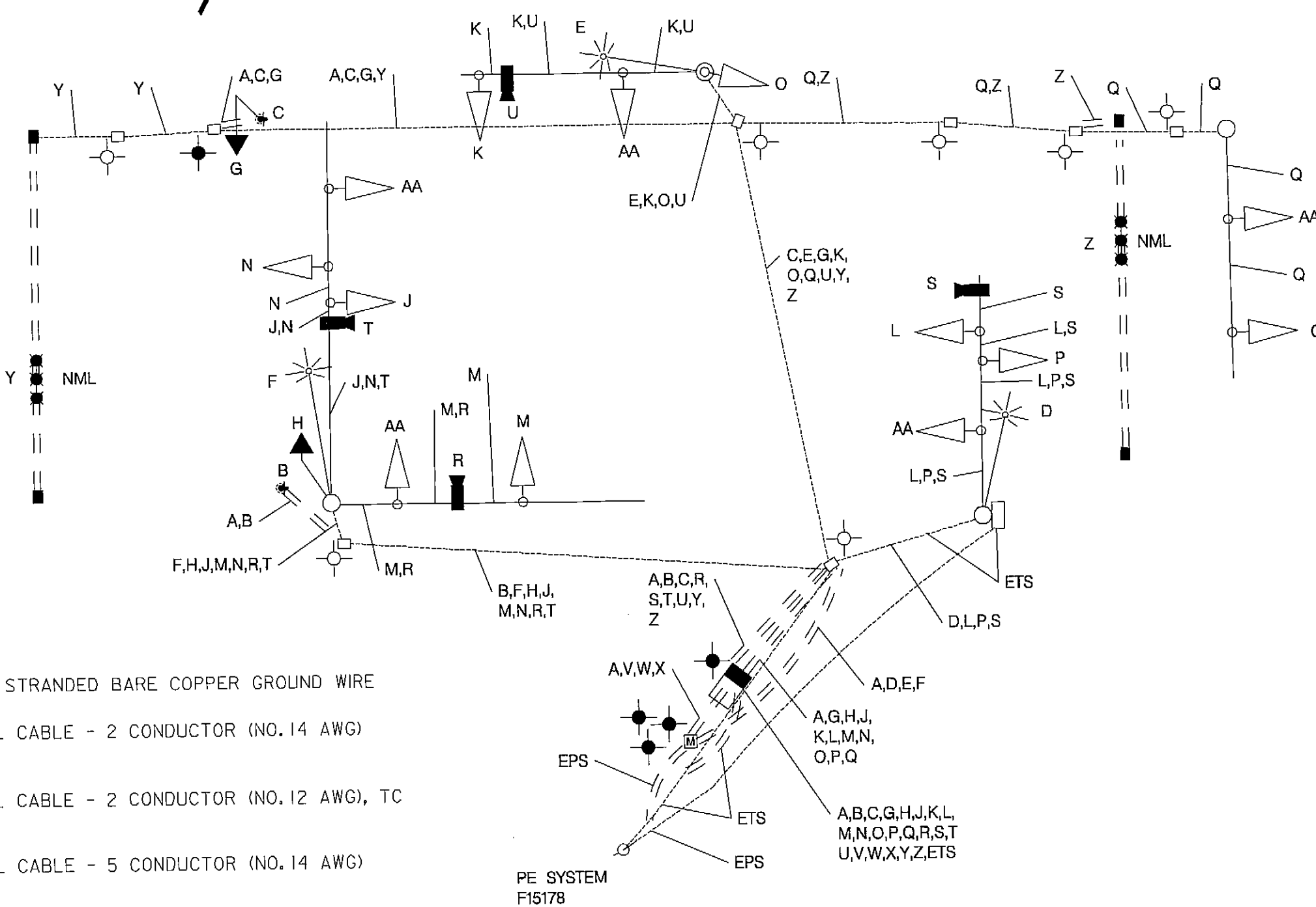
## EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO QUANTITY DESCRIPTION

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

## WIRING DIAGRAM



- A] NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- B] ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
- C] ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
- D] ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- E] ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

F] VIDEO DETECTION CAMERA CONTROL CABLE - 500 FEET

G] ELECTRICAL CABLE - 1 CONDUCTOR (NO. 8 AWG THHN/THWN)

H] NON-INVASIVE MICROLOOP PROBE LEAD IN CABLE

I] USE EXISTING WIRING

J] NON-INVASIVE MICROLOOP PROBE SET

K] PULL-BACK AND REROUTE EXISTING POWER SERVICE FROM EXISTING POLE MOUNTED CABINET TO PROPOSED BASE MOUNTED CABINET

L] PULL-BACK AND REROUTE EXISTING TELEPHONE SERVICE FROM EXISTING POLE MOUNTED CABINET TO PROPOSED BASE MOUNTED CABINET

M] EXISTING GROUND ROD

N] PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

O] PROPOSED METERED SERVICE PEDESTAL

TOD NO: XX424-11  
SHA NO: FR552A58/858  
MD 140 @ Silo Hill Road

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 140 (E. MAIN STREET)  
AT SILO HILL ROAD  
EMMITTSBURG, MARYLAND

## GENERAL INFORMATION

SCALE NONE ADVERTISED DATE 03/2011 CONTRACT NO. XX4245185

DESIGNED BY MCG COUNTY FREDERICK  
DRAWN BY MCG LOGMILE 10014004.77  
CHECKED BY MTS TMS NO. K639  
F.A.P. NO. TOD NO.

TS NO. 4209-C-GI DRAWING 5G-02 OF 02 SHEET NO. 02 OF 02

PLOTTED: Wednesday, February 23, 2011 AT 03:38 PM  
FILE: L:\PROJECTS\4014255\4014255\_0109\Drawings\TRA\p8G-H000\_MD140.dgn